

## § 56.50-20

(e) Main and auxiliary steam stop valves must be readily accessible, operable by one person and arranged to seat against boiler pressure.

(f) The auxiliary steam piping of each vessel equipped with more than one boiler must be so arranged that steam for the whistle and other vital auxiliary systems, such as the electrical-generation plant, may be supplied from any power boiler.

(g) Steam and exhaust pipes shall not be led through coal bunkers or dry cargo spaces unless approved by the Commandant.

(h)(1) Steam piping, with the exception of the steam heating system, must not be led through passageways, accommodation spaces, or public spaces unless the arrangement is specifically approved by the Marine Safety Center.

(2) Steam pressure in steam heating systems must not exceed 150 pounds per square inch gage, except that steam pressure for accommodation and public space heating must not exceed 45 pounds per square inch gage.

(3) Steam lines and registers in non-accommodation and non-public spaces must be suitably located and/or shielded to minimize hazards to any personnel within the space. Where hazards in a space cannot be sufficiently minimized, the pressure in the steam line to that space must be reduced to a maximum of 45 pounds per square inch gage.

(4) High temperature hot water for heating systems may not exceed 375°F.

(i) Where positive shutoff valves are fitted in the exhaust lines of machinery, and the exhaust side, including engine steam cylinders and chests, turbine casings, exhaust piping and shutoff valves, is not designed for the full inlet pressure, the exhaust side must be protected from over pressure by one of the following means:

(1) A full flow relief valve in the exhaust side so set and of sufficient capacity to prevent the exhaust side from being accidentally or otherwise subjected to a pressure in excess of its maximum allowable pressure.

(2) A sentinel relief valve or other warning device fitted on the exhaust side together with a back pressure trip device which will close the inlet valve prior to the exhaust side pressure ex-

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ceeding the maximum allowable pressure. A device that will throttle the inlet valve, so that the exhaust side does not exceed the maximum allowable pressure, may be substituted for the back pressure trip.

(j) Shore steam connections shall be fitted with a relief valve set at a pressure not exceeding the design pressure of the piping.

(k) Means must be provided for draining every steam pipe in which dangerous water hammer might otherwise occur.

[CGFR 68-82, 33 FR 18843, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9978, June 17, 1970; CGFR 72-59R, 37 FR 6189, Mar. 25, 1972; CGD 73-254, 40 FR 40165, Sept. 2, 1975; CGD 77-140, 54 FR 40607, Oct. 2, 1989; CGD 83-043, 60 FR 24772, May 10, 1995; USCG-2003-16630, 73 FR 65178, Oct. 31, 2008]

### § 56.50-20 Pressure relief piping.

(a) *General.* There must be no intervening stop valves between the vessel or piping system being protected and its protective device or devices, except as specifically provided for in other regulations or as specifically authorized by the Marine Safety Center.

(b) *Discharge lines (reproduces 122.6.2(d)).* Discharge lines from pressure-relieving safety devices shall be designed to facilitate drainage.

(c) *Stop valves.* Stop valves between the safety or relief valve and the point of discharge are not permitted, except as specifically provided for in other regulations or as specifically approved by the Marine Safety Center.

(d) *Reference.* See also § 56.07-10(a) and (b) for specific requirements.

[CGFR 68-82, 33 FR 18843, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9979, June 17, 1970; CGD 77-140, 54 FR 40607, Oct. 2, 1989]

### § 56.50-25 Safety and relief valve escape piping.

(a) Escape piping from unfired steam generator, boiler, and superheater safety valves shall have an area of not less than that of the combined areas of the outlets of all valves discharging thereto and shall be led as near vertically as practicable to the atmosphere.

(b) Expansion joints or flexible pipe connections shall be fitted in escape piping. The piping shall be adequately supported and installed so that no